IN THE SPECIFICATION:

Please replace paragraph [0009] with the following amended paragraph:

[0009] As devices get smaller, liner layers, cap layers, and etch stop layers contribute more to the overall dielectric constant of ~~μa~~ a multi-component dielectric layer. There remains a need for low k dielectric layers which have excellent barrier properties for use as liner or cap layers. There also remains a need for low k dielectric layers which have sufficient oxide content for use as etch stop layers. Ideally, the low k dielectric layers would be compatible with existing low k dielectric materials and could be deposited in the same chambers as existing low k dielectric materials.

Please replace paragraph [0035] with the following amended paragraph:

[0035] When susceptor 12 and the wafer are in processing position [[14]], they are surrounded by an insulator 17 and process gases exhaust into a manifold 24. During processing, gases inlet to manifold 11 are uniformly distributed radially across the surface of the wafer. A vacuum pump 32 having a throttle valve controls the exhaust rate of gases from the chamber.

Please replace paragraph [0038] with the following amended paragraph:

[0038] Typically, any or all of the chamber lining, gas inlet manifold faceplate, support stem 13, and various other reactor hardware is made out of material such as aluminum or anodized aluminum. An example of such a CVD reactor is described in U.S. Patent 5,000,113, entitled "Thermal CVD/PECVD Reactor and Use for Thermal Chemical Vapor Deposition of Silicon Dioxide and In-situ Multi-step Planarized Process," issued to Wang et al. ~~And~~ and assigned to Applied Materials, Inc., the assignee of the present invention.

Please replace paragraph [0050] with the following amended paragraph:

[0050] In some processes, an inert gas such as helium or argon is flowed into the reactor 10 to stabilize the pressure in the chamber before reactive process gases are introduced into the chamber. For these processes, the process gas control subroutine 460 is programmed to include steps for flowing the inert gas into the chamber 10 for an amount of time necessary to stabilize the pressure in the chamber, and then the steps described above would be carried out. Additionally, when a process gas ~~it~~ is to be vaporized from a liquid precursor, for example phenyl silane, the process gas control subroutine 460 would be written to include steps for bubbling a delivery gas such as helium through the liquid precursor in a bubbler assembly. For this type of process, the process gas control subroutine 460 regulates the flow of the delivery gas, the pressure in the bubbler, and the bubbler temperature in order to obtain the desired process gas flow rates. As discussed above, the desired process gas flow rates are transferred to the process gas control subroutine 460 as process parameters. Furthermore, the process gas control subroutine 460 includes steps for obtaining the necessary delivery gas flow rate, bubbler pressure, and bubbler temperature for the desired process gas flow rate by accessing a stored table containing the necessary values for a given process gas flow rate. Once the necessary values are obtained, the delivery gas flow rate, bubbler pressure and bubbler temperature are monitored, compared to the necessary values and adjusted accordingly.

Please replace paragraph [0057] with the following amended paragraph:

[0057] Referring to Fig. 6A, the PECVD lining layer 300 is deposited in the reactor 10 by introducing an organo silane compound such as CH_3SiH_3, an oxidizing gas such as ~~N_20~~ $\underline{N_2O}$, and a carrier gas such as helium. The substrate is maintained at a temperature of from about -10 to about 450°C, and preferably is maintained at a temperature of approximately 0°C throughout the deposition of the PECVD lining layer. The PECVD lining layer 300 is deposited with a process gas that includes a mixture of the organo silane compound at a flow rate of about 5 sccm to about 500 sccm and the

oxidizing gas at a flow rate of about 5 sccm to about 2000 sccm. The process gases are carried by an inert gas such He, Ar, Ne, or a relatively inert gas such as nitrogen, which are typically not incorporated into the film, at a flow rate of from about 0.2 to about 20 lpm. The process gases react at a pressure from about 0.2 to about 20 Torr to form a conformal polymer layer on the substrate surface 304 and metal lines 306, 308, 310, on the substrate surface. The reaction is plasma enhanced with a power density ranging from 0.05 W/cm^2 to 1000 W/cm^2, preferably about 0.3 W/cm^2.

Please replace paragraph [0062] with the following amended paragraph:

[0062] A dual damascene structure which includes an oxidized organo silane ~~layers~~ <u>layer</u> as an etch stop or as an intermetal dielectric layer is shown in Figure 7. When the oxidized organo silane is used as an etch stop, a first dielectric layer 510 is deposited on a substrate 512 and then the oxidized organo silane etch stop 514 is deposited on the first dielectric layer. The etch stop is then pattern etched to define the openings of the contacts/vias 516. A second dielectric layer 518 is then deposited over the patterned etch stop and then pattern etched by conventional methods to define the interconnect lines 520. A single etch process is then performed to define the interconnects down to the etch stop and to etch the unprotected dielectric exposed by the patterned etch stop to define the contacts/vias.

Please replace paragraph [0072] with the following amended paragraph:

[0072] The following example demonstrates deposition of an oxidized organo silane film having excellent barrier and adhesion properties. This example was undertaken using a chemical vapor deposition chamber, and in particular, a CENTURA ~~DxZTM~~ <u>DxZ</u>™ system which includes a solid-state RF matching unit with a two-piece quartz process kit, both fabricated and sold by Applied Materials, Inc., Santa Clara, California.